

INTEGRATING CRITICAL THINKING IN THE CURRICULUM OF THE
COMMAND AND GENERAL STAFF COLLEGE

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General Studies

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

INTEGRATING CRITICAL THINKING IN THE CURRICULUM OF THE
COMMAND AND GENERAL STAFF COLLEGE, by Brian James Doyle, 84 pages.

The Command and General Staff College endeavors to instill critical thinking as a skill practiced by its graduates. To this end the college has introduced the concept of critical thinking as a class within the core curriculum. Students must take a “critical thinking test” both before and after the block of core instruction, and numerous graphic training aids line the classroom walls in an attempt to reinforce these ideas. However, it remains questionable whether or not the concepts of critical thought, that are taught by the school, have made their way into the course work and class structure within the college. This thesis will contend that to create critical thinkers CGSC must incorporate the tenets of critical thinking throughout its curriculum and course design. Grading rubrics for papers and tests, exam questions written to steer answers in a certain “correct” direction all to a degree contradict the tenets of critical thought, yet exist within the course of study. Ideally, CGSC can stand as a seminal experience in the development of officers. An experience akin to that found in civilian graduate level education can be attained, but it will require a cultural revolution within the faculty to transition from a model based on training to a model based on education.

ACKNOWLEDGMENTS

This thesis is a direct result of my experience as a student at the Command and General Staff College in the 08-01 Class. Although the thesis that follows is critical of the College and the manner that it attempts to integrate critical thought in its curriculum, I truly enjoyed and value the educational experience I encountered here. I have grown in my understanding of the Armed Forces, and in the role I can have as a field grade officer. The critical analysis that follows is my attempt to make CGSC even better.

I would be remiss if I did not thank the people who made my experience what it was. My Staff Group, 9C, is full of bright and articulate officers. All of them have assisted me in learning and growing. In particular I would like to thank LtCol Bryan Cannady, MAJ Larry Geddings, LCDR Danielle Low and MAJ William Miller for their input to this work, and their friendship and support throughout the course. My instructors have also been invaluable to my development. In particular I express my thanks to LTC Mark Camarena, LtCol John Curatola, LTC (R) Kenneth Riggins and LTC (R) Robert Riley who all mentored me and put up with my endless questions.

Finally I would like to thank my family. As a geographic bachelor for the year my wife Melissa, and daughters Emily and Margaret endured a year of separation in which we have all grown to love each other all the more. I thank them for their continued support and love.

TABLE OF CONTENTS

	Page
MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE	iii
ABSTRACT	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS	vi
ACRONYMS	viii
CHAPTER 1 INTRODUCTION	1
Critical Thinking	1
Context	1
In Pursuit of Intellectual Integrity	1
Identity Crisis	4
Education	6
Research Questions and Thesis Statement	8
CHAPTER 2 LITERATURE REVIEW	10
Plato	11
German General Staff Education	12
Kant	13
Hegel	16
Clausewitz	17
“Thinking In Time”	18
Paul and Elder	20
Knowledge Production	21
Academic Development	22
Teaching Critical Thinking	23
Power of Paradigms	24
Guidance from the Chairman of the Joint Chiefs	24
Training versus Education	25
Army Training Model	27
Faculty Development Program	28
Basis for Analysis	29
CHAPTER 3 RESEARCH METHODOLOGY	31
Realist Approach	32

The Nature of Social Inquiry	34
Qualifications / context of field research.....	36
CHAPTER 4 ANALYSIS.....	40
Command and General Staff School	41
Department of Military History	41
Department of Command and Leadership	43
Department of Logistics and Resource Operations	45
Department of Joint, Interagency, and Multinational Operations	47
Center for Army Tactics	49
Naval War College.....	51
Alternative Futures	52
Example	55
Grading	55
Building and Maintaining a Faculty	57
The Military Decision Making Process	60
Incorporating Non-US Reference Material.....	62
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	65
God and Man at CGSC?	65
Breaking the Paradigm.....	66
Rubrics and Assessment	67
Comprehensive Exams	68
Writing Assignments	68
Revolution.....	69
A Separate Major Command	70
Recommendations for Further Research.....	70
Final Thoughts	71
REFERENCE LIST	72
INITIAL DISTRIBUTION LIST	75

ACRONYMS

CGSC	Command and General Staff College
CGSS	Command and General Staff School
CJCS	Chairman of the Joint Chiefs of Staff
COE	Contemporary Operating Environment
COIN	Counter Insurgency Operations
CTAC	Center for Army Tactics
DCL	Department of Command and Leadership
DJIMO	Department of Joint, Interagency, and Multinational Operations
DLRO	Department of Logistic and Resource Operations
DMH	Department of Military History
DOD	Department of Defense
ELO	Enabling Learning Objective
FDP	Faculty Development Program
ILE	Intermediate Level Education
MDMP	Military Decision Making Process
NWC	Naval War College
OPMEP	Officer Professional Military Education Policy
PAJE	Process for Accreditation of Joint Education
PME	Professional Military Education
SAMS	School of Advanced Military Studies
TLO	Terminal Learning Objective
TRADOC	Training and Doctrine Command
UNC	University of North Carolina, Chapel Hill

USMA United States Military Academy

CHAPTER 1

INTRODUCTION

Critical Thinking

“Army leaders are faced with a variety of problems, each requiring its own solution. A problem may be broad and conceptual, such as how to improve unit readiness; or more refined, such as determining the best allocation of a critical resource. Critical reasoning (thinking) is key to understanding situations, finding causes, arriving at justifiable conclusions, making good judgments, and learning from experience—in short, problem solving.”

FM 5-0 (Department of the Army 2005, 2-8)

Context

The goal of this thesis is to address the topic of developing critical thinkers through the curriculum of the US Army’s Command and General Staff School (CGSS), which is a part of the Command and General Staff College (CGSC), Fort Leavenworth, Kansas. Thus, this is thinking critically about critical thinking. As a current student at CGSS, the author brings a bias, or what Paul and Elder refer to as “egocentric thinking” to this thesis (Paul and Elder 2004, 6). Further, the reader will also bring egocentric thinking about the topic at hand. The author will, throughout this thesis, attempt to identify where his own bias lies, and it is desirable for the reader to keep the nature of their own perspective in mind as they proceed with this analysis.

In Pursuit of Intellectual Integrity

The primary source for introducing critical thinking to the officers enrolled in the CGSS is the work of Dr. Richard Paul and Dr. Linda Elder. Their “Miniature Guide to Critical Thinking; Concepts and Tools” is distributed to every student and addressed in course work the very first week of class. The challenge of this thesis is to stay true to the

basis of critical thinking while the techniques and methods of inculcating students to this manner of thought are explored.

Paul and Elder have developed a series of texts on the topic of critical thinking. These texts endeavor to assist students in becoming “a well cultivated critical thinker” (Paul and Elder 2004, 1). They have further honed this down in their “Miniature Guide” into a series of checklists and reflection points which deal directly with methods that students and faculty can utilize to make instruction in all disciplines more critically thought provoking. This fits well in the mission of CGSS. The Chairman of the Joint Chiefs of Staff (CJCS) has identified critical thinking at the heart of what he calls the “purest form” of education, and thus essential to the development of Military Officers (Department of Defense 2005, A-1).

Paul and Elder address eight “Essential Intellectual Traits” which are the result of a thinker who applies the ten “Intellectual Standards” to the eight “Elements of Reasoning” (Paul and Elder 2004, 18). The trait of Intellectual Integrity states that a thinker – or writer in this case – must apply the same “rigorous standards” to his own thinking as he would apply to his antagonists’ (Paul and Elder 2004, 14). In constructing the research question for this thesis it is imperative that the trait of “Intellectual Humility” also be judiciously applied. That is to say, it must be acknowledged from the outset that this paper is delivered with a certain amount of what Paul and Elder refer to as “native egocentrism.” The author brings his own CGSS experience, which, while allowing him to comment first hand on the course, also strongly colors his view because of the narrow exposure to the wide breadth of instructors and student peers who facilitate the learning process.

Students arriving at CGSS in August of 2007 were immediately aware that there is great emphasis at the College on the evolution of the curriculum to institute a program that develops critical thinkers for the Army. How this is accomplished, and to what degree is largely the subject matter of this thesis. The author has observed that the principles taught in the C121 lesson – “Introduction to Critical Thinking and Problem Solving,” are not always integrated into the remainder of the curriculum nor the “architecture” of the courses. This is the most challenging part of evolutionary change within an organization. The doctrine has been identified and is being taught, but the tenets of that doctrine have not yet received the “buy in” of all the parties. Some of the resistance could be a disagreement with the doctrine. Some may simply be that the link between this thinking model and alteration of individual teaching styles has yet to be accomplished. It is also possible that it is the author’s perception of how the principles should be applied that color this observation.

A deeper question revolves around the validity of the model selected for inculcating the skill of critical thought. Through this thesis the author will explore the philosophical roots of critical thinking. From this, the curriculum at CGSS will be interrogated to see whether it does or does not embody, the concepts of critical thought and if so, to what degree. Further focus will then be given to the manner in which this is integrated into the teaching and learning process.

There are several parameters within which the school is set. The Department of Defense (DOD) has established guidance for the requirements of Intermediate Level Education (ILE). The Department of the Army has also added its own requirements. Regional civilian academic accreditation also establishes parameters with regard to

curriculum, assessments and faculty accreditation. But even within these various parameters, there is room to adjust. Other Services approach the requirements set forth by the DOD in different ways than the College at Fort Leavenworth. This thesis will attempt to explore the existing parameters for the curriculum and avenues for change that remain within the boundaries of these requirements.

Identity Crisis

In many ways the College is part of an Army-wide debate about the role of education vs. training. Some would argue that all schools do a little of both, and it merely differs with regard to the degree. Upon entering this school a common advisory warns students, “stay away from the ‘college student mentality;’ this is a graduate-level military educational institution with a primary focus of instructing professional military officers in the art and science of warfighting” (CGSS Staff Group 9C Day 1 Brief). The emphasis, or at a minimum the rhetoric, to make this experience similar to graduate school is palpable throughout the instruction. However, there are also significant portions of this school that seem drawn to the paradigm espoused by the Army’s tried and true training model. It will be argued that the difference between these two techniques often boils down to the independence given to the student to approach issues critically.

There are also examples of instruction, and instructors, which do not seem to achieve either purpose and illustrate vividly some of the frustration felt by students who are introduced to the concepts of critical thought and then exposed to assignments that seemingly neither train nor educate. By way of example, in the W100 portion of instruction, students are required to produce a logistics estimate as part of a planning exercise.

The author's staff group had considerable difficulty with this assignment. There was no block of instruction on how to prepare a logistics estimate nor were any sources suggested for self education. Thus, most of the difficulty encountered stemmed from a lack of understanding of the logistics planning process. The instruction that was provided did not lead the student to formulate what the final product should look like (as a training model would) nor did it impart on the students a desire to pursue individual study in the area in an effort to understand the undergirding concepts of this process (as an education would).

In the end the group was assessed a grade of "C" on the final product – this was a group grade. The reason that the instructor gave for granting a "C" was that he did not have time to retrain the group as would be required if the group had not passed. Notes on the assessment form referenced the fact that the product was incomplete. The most troubling aspect of this incident is the fact that the instructor would not allow a "redo" of this assignment nor could he produce an example of what "right looks like." When questioned about the grading of the assignment, the instructor stated that there was "no standard cut sheet" and inferred that the grading was largely subjective - not an entirely bad thing, but troubling in that he was clearly looking for something, and, even after the fact, he could not delineate what it was. The instructor also stated that the grade was in part gauged upon the work of another staff group and the disparities that existed between the two products. This does not correspond with the Army's training model and is most assuredly not in line with the evaluation of graduate level work.

Education

Critical thinking and development of this ability is thought of by some as an anathema to how the institutional Army does business. The US Army is steeped in tradition and tied to its problem solving techniques – embodied most prominently in the Military Decision Making Process (MDMP). The Army seeks to establish routine – a common operating procedure for everything. There is a certain amount of utility in this approach for most of the endeavors of the Army. Chiefly, this approach can be trained. Individuals can be taught the steps and procedures that should be followed. This then facilitates a ‘lingua franca’ or common language between individuals who have not worked together before. There is perhaps a danger, however, when we try to adapt this modus operandi to the pursuit of education. The conventional Army response of mandating a class or training aid to address every challenge to the force can be seen as hindering the true production of knowledge as it creates a master solution rather than allowing subordinate units to work through the challenge as it affects them.

At CGSC the insertion of training on how to conduct a media interview is a manifestation of this impulse. To equip leaders for dealing with the media, classes have been created that attempt to teach officers how to deal with the press – what questions they will ask, how and when to respond and so forth. But what is the best way to prepare officers for a media engagement? It could be argued that perhaps, rather than break press interaction down into checklists and processes, we should critically analyze what it is that the press is looking for, and how this can affect the image of the Army. By this argument we are equipping officers with the tools they need to adapt to a changing environment

vice equipping them for what we think the environment will be like. This harkens back to the chairman's call for adaptive leaders.

Intermediate Level Education (ILE) – offered to career professionals, who by now understand the rudimentary aspects of their chosen profession – or at the very least where to find out more – should be focused on developing thought and understanding. This is good not only for the individual, but for the institution as well. Indeed Karl Popper, renowned philosopher of science, explains that this is truly the only way for a discipline – or institution - to advance itself (R. Johnston 1997, 19). The progression of the Army, thus cultivated through critical thought, should be a desired end state for all involved.

Vietnam War Prisoner of War Vice Admiral James Stockdale wrote, “Education should take care to illuminate values, not bury them amongst the trivia” (Stockdale 1986, 12). In reflecting on his time in captivity and the stress that he endured he further stated that,

“[m]ost of us prisoners found that the so-called practical academic exercises in how to do things, which I’m told are proliferating, were useless. I’m not saying that we should base education on training people to be in prison, but I am saying that in stress situations, the fundamentals, the hardcore classical subjects, are what serve best.”

(Stockdale 1986, 21)

The fundamentals he speaks of can greatly assist in providing a basis – a rationale – for officers in many stressful situations. True education, it will be argued, will provide the combat leader with a foundation upon which to understand and critically analyze the mission at hand. How then has the genesis and evolution of CGSS enhanced or taken away from the production of such an educational experience? How has the school changed as the requirements of the Army have changed? How do sister services

accomplish the same goals? Philosophical work on education and enlightenment will be interrogated from the works of Kant and Hegel to the ideas of Plato and Aristotle. In relation to the profession of arms, Kant tells us, “Thus it would be very harmful if an officer who given an order by his superior, should start, while in the service, to argue concerning the utility or appropriateness of that command. He must obey, but he cannot equitably be prevented from making observations as a scholar concerning the mistakes in the military service nor from submitting these to the public for its judgment” (Kant 2001, 137).

Research Questions and Thesis Statement

The curriculum of CGSS will be interrogated with an eye toward understanding critical thinking, and how the school can most effectively pursue the goal of developing this process in its graduates. Contradictions exist between the stated mission and the actual result of the educational program of study. While the idea of critical thinking is introduced, inconsistencies appear in the curriculum and course architecture of the college, the teaching styles displayed by some of the instructors, and the learning aptitude displayed by students. Can the tenets of critical thought be inculcated within the school more effectively so that it not only teaches them, but exemplifies the spirit they embody? In what ways can the courses offered enhance the opportunities for critical thought while still serving a role in training the force?

To create critical thinkers CGSS must incorporate the tenets of critical thinking in its curriculum and course design. These tenets are described by Paul and Elder, among others. They are taught in C121, but they are not always utilized in curriculum design. It will be argued that grading rubrics for papers and tests, exam questions written to steer

answers in a certain “correct” direction can, perhaps inadvertently, contradict the tenets of critical thought, yet exist within the course of study.

Ideally, CGSS can stand as a seminal experience in the development of officers. The graduate experience can be attained, but it will require a cultural revolution within the faculty and adherence to critical thought within the curriculum, to more fully transition from a model based on training to a model based on education. This thesis will seek to examine the curriculum to identify areas that can be improved upon. It is hoped that this can lead to adjustments that will assist in developing critical thinkers for the Army.

CHAPTER 2

LITERATURE REVIEW

“The moral challenges of life come to us every day, in many different forms and in many different circumstances. To meet these challenges successfully, to emerge from them with our integrity intact, we need to prepare ourselves, we need to see what it means to be a man who has studied what he ought.”

- James B. Stockdale (Brennan 1992)

“Dubito, ergo cogito, ergo sum” – “I doubt, therefore I think, therefore I am”

(Descartes 1637). This could easily be a subtitle of this thesis. Descartes, in this his most famous of pronouncements, sums up the very nature of man’s relation to critical thought. By our very nature we are critical thinkers. The problems occur when our thought is contained or directed. This often times occurs when people become part of a larger body – such as the Army – and we develop what is known as ‘group think’ or innate sociocentrism (Paul and Elder 2004). Education can facilitate severing the connections with group think. Philosophers from classical times have stressed the importance of education in free and open terms – terms that would encourage critical thought.

There is a varied and prodigious body of literature which could be introduced in support of this thesis. For brevity, selections will be made based on creating a line of logical thought from classical thinkers to the present. Omission will certainly occur, but the intent is for a foundation to be constructed that will bear the weight of the proffered arguments. Philosophical writings ranging from the classical thoughts of Socrates and Plato to the modern thoughts of Kant and Popper will be interrogated with regard to the production of knowledge and the general enlightenment of man. The roots of western philosophy are found in questioning. The father of this tradition is none other than

Plato's teacher, Socrates (Plato 1985). The "Socratic Method," as it is known, is at heart critical thinking. Socrates and Plato specialized in upending orthodoxies as a means of educating through critical analysis of presumed 'givens' (Plato 1985, 13).

Plato

Plato spends a great deal of time considering the idea of knowledge and how one arrives at its production. The "Allegory of the Cave" provides useful discussions regarding the essence of knowledge and its relation to man. This allegory addresses the effect of education on the nature and consciousness of man. Plato constructs a situation where men from birth are kept in bondage in a cave and can see nothing but shadows on a wall in front of them. These shadows form their complete understanding of the world. The shadows are the product of a reality that is created for them by their masters – images of idols paraded before a fire (Plato 1985).

Plato then leads us through their reaction as one is released – or escapes - and is introduced to the world beyond the shadows. The man is actually taken aback and at first longs for the comfort of what he knows – the shadows. Adjusting to the reality of the world in daylight affects the man both mentally and physically. The cave was much easier in some ways, contained and easy to comprehend. However, reality gradually affects the man and he is overcome by the feelings of freedom and knowledge. Thus Plato makes the case that the confrontation of understandings, as uncomfortable as it can be, is what education entails (Plato 1985).

The man in the allegory, altered by his experiences with 'true reality' feels compelled to share his new found knowledge with those still in the cave. When he returns, the ideas he expresses are so foreign and so outlandish to his former fellow

captives that they now mock him for what he says. This is an example of group think which is inclined to reject that which is different from what is known and understood. The construction of a dominant paradigm – that the shadows are reality – is difficult to overcome. The man still does his best to attempt to enlighten those men but discovers that nothing short of introducing them physically to the outside world will cause them to change paradigms (Plato 1985). Likewise we all must go through the process of not only adjusting our own norms to new ideas, but assisting those around us in their adjustment as well.

Is the curriculum at CGSC based on justifying the existence of the “shadows on the wall?” Or is it rather rooted in creating the impetus for the student to seek the source of those shadows and the truth that is in that source. CGSC should provide an avenue to challenge the paradigms that officers are accustomed to over the course of their careers. Officers so enlightened then become assets to the Army as they provide the stimulus to adapt and modify the manner in which the organization operates for greater purchase and efficiency.

German General Staff Education

History can also enhance our understanding of the education of professional military officers. The education mandated for those selected to be on the German General Staff shaped the understanding of the likes of Clausewitz, Scharnhorst, Gneisenau and Moltke. These individuals in turn became the subject of the education of future officers. This tradition is well known and studied – and to a degree reproduced - in the curriculum of the CGSS. This system has even influenced the development of CGSC. The “War Book of the German General Staff” states, “the officer is a child of his time.

He is subject to the intellectual tendencies which influence his own nation; the more educated he is the more this will be the case” (Grossgeneralstab 2005, 6). Here, in the case of the Prussian Army, we can find a tradition that places great value on education and critical thought.

This German military tradition which forms the centerpiece of the H100 curriculum for CGSC is the starting point for US military thought. It should then be natural to examine the development of critical thinking within this tradition as well. For even as the German General Staff was being formed, and the theories which inspired it were brought to fruition, great attention in that organization was being paid to the nature of thought. These writings undoubtedly influenced the great military writers of the day in the manner in which they approached their subject. It also greatly influenced the way in which education for the armed forces was approached and implemented.

By way of example, Count Gerhard von Scharnhorst, who founded the Prussian War College, required all of the students of that institution to read the works of Immanuel Kant. Scharnhorst saw the value in exploring the very nature of man and the meaning of knowledge. This provides a base from which to expand learning of any subject. One of the students of this curriculum was Carl von Clausewitz, who, as the author of “On War,” features prominently in the curriculum in CGSC (Brennan 1992, 74).

Kant

Immanuel Kant revolutionized the course of western philosophy. He “laid the foundation for the way people in the last two centuries have confronted such widely differing subjects as the experience of beauty and the meaning of human history” (Kant 2001, vii). Kant’s work occurred in the German Imperial era, and as such he had an

impact on the military revolutions occurring at the same time. Kant's early career occurred during the reign of Frederick the Great. While the Kaiser was known historically as a military despot, he encouraged the intellectual curiosity of academics such as Kant, and did not deter his research on topics ranging from religion to the nature of man within the state (Kant 2001, xx). This changed, however, with the ascent of Friedrich Wilhelm III.

Interestingly, Kant did not flee the German state, or lead radical movements against the sovereign. King Friedrich Wilhelm did not agree with Kant's writings on religion, and to appease the king, Kant restricted his comments during this time, so that he could maintain his position within academia (Kant 2001).

It should not be overlooked that the careers of Kant and Clausewitz overlapped as they did. Clausewitz was exposed to the writings and thoughts of Kant throughout the course of his education and perhaps within the social context of the Prussian court. The ideas of the enlightenment would have been found throughout the German state during this time period.

Kant's 1784 "Answer to the Question: What is Enlightenment?" describes the qualities that are needed for man to become "enlightened." He claims that often organizations create processes and parameters that restrict man's ability to fully use his "natural faculties" in thinking (Kant 2001, 136). Public use of reason, he argues, should be the goal of all men. Rather than guide and restrict thought, society and organizations should encourage free thought. Kant draws a distinction between free thought and obedience. He clearly sees the need for centralized authority, and the need for individuals within society to obey the law (Kant 2001).

However, within an academic context he believes that individuals within these organizations should not be told how or when to think. This must be free and open. The members of organizations within society should also be free to express their ideas. Kant exemplifies these beliefs not only in his writings, but in his life. As detailed earlier, when the Kaiser disapproved of his ideas, he curtailed his efforts rather than defy authority (Kant 2001).

Kant emphasizes the motive of duty. He sees great moral worth in the pursuit of duty. This makes Kantian ethics extremely appropriate for military education. Vice Admiral Stockdale and Joseph Brennan, a distinguished professor of philosophy from Columbia University, understood the importance of Kant. They designed and taught a course at the Naval War College – The Foundation of Moral Obligations – which is largely based on Kant and his writings, as well as those by other philosophers. They felt that military officers needed to have this as a basis for their understanding of the world and all of its complexities. Brennan offers that while Kant desired peace, he felt that, “each nation should keep its hand on the hilt of its sword” (Brennan 1992).

This nuanced approach to critical thinking is what makes his writings and beliefs so applicable to the curriculum at CGSC. Kant is not a rebel who encourages defiance of authority. He only seeks to develop sound thinking within organizations, such as the Army. Using this framework, the institutions at this school that prohibit the use of natural faculties could be identified as the imposition of directed questions, thinking processes and grading rubrics. If they are poorly constructed these institutions run the risk of containing thought and actually reducing the students understanding of the concepts under consideration.

Hegel

Like Kant, Hegel was a German philosopher who largely dealt with the realities of the French Revolution as a context for exploring the nature of man. The French Revolution was a seminal event in this period because it represented the triumph of man against an infallible sovereign. This idea, that individuals could determine their own destiny, fueled the thoughts of the philosophers of this period. In his “Philosophy of History,” Hegel delves into the nature of thought. He states, “[t]hought is, indeed, essential to humanity. It is that distinguishes us from the brutes” (Hegel 1902, 51). Hegel continues to develop this idea, linking thought to the establishment of reason. Reason, he then contends, is the “Essence and Truth” of “the infinite complex of things” (Hegel 1902, 53). He then asserts that thought, espoused as reason, is “not needing, as finite action does, the conditions of an external material of given means from which it may obtain its support, and the objects of its activity” (Hegel 1902, 53).

Hegel makes clear in this way that thought should not be constrained in its exercise. Outside constraints which serve to direct thought actually serve to stifle that which is the desired result. Course work at CGSC runs the risk of falling into this trap of stifling thought. Processes to focus our thought, such as the MDMP serve in this analysis to limit the approach to various problems. There are of course occasions when such conditions have a purpose, and indeed other intellectuals have suggested the use of mental models – such as the MDMP - can actually facilitate critical thought. However, in an institution predicated on the notion of education, the approach to, and imposition of such models should be considered in light of these concerns.

This is not to suppose that Hegel was against “training” or the presentation of processes to build a foundation from which to engage in education. Indeed he states, “[t]he investigator must be familiar a priori with the whole circle of conceptions to which the principles in question belong” (Hegel 1902, 116). This fits well with the early stages of PME in which officers are trained in the facets of the profession. Once this foundation is laid, Hegel would argue that then freedom of thought should take the investigator to explore these conceptions in a free and abstract form without the “shackles” of processes and constraints (Hegel 1902).

Clausewitz

In discussing the nature of knowledge that is required by a commander, Clausewitz seizes on the need for a broad liberal type of education (Clausewitz 1976, 96). Like Kant’s explanation of knowledge development, Clausewitz states that it “cannot be forcibly produced by an apparatus of scientific formulas and mechanics” (Clausewitz 1976, 97). He stresses the importance of thought and reflection in the education of commanders. Theory – not doctrine must be the focus of intellectual development according to Clausewitz. Specifically that is, to synthesize the available information and apply it to the situation at hand. This is the very essence of “use[ing] one’s intelligence without the guidance of another” (Kant 2001, 135).

In chapter five, book two of “On War,” Clausewitz addresses the idea of critical analysis. He makes the case that nothing that occurs in warfare is from a single cause. Rather, events in war often occur as the result of concurrent causes. Therefore, analysis that is limited to a mere arrangement of facts, one after the other to establish causal relationships often miss the bigger picture (Clausewitz 1976, 106). Clausewitz gives

great relevance to the need for commanders to be reflective and open to multiple opinions and perspectives as they consider their actions.

Again Clausewitz elucidates the need for an education based on theory and not doctrine. He uses the terms in much the way that we consider training and education. In this way doctrine is the rote method of applying a technique. Theory is a more general understanding of the circumstances and the influencers of the action. “[T]heory,” according to Clausewitz, “is not meant to provide him [the commander] with positive doctrines and systems to be used as intellectual tools” (Clausewitz 1976, 122). What then would he think of the US Army’s reliance on tools such as Military Decision Making Process (MDMP)? The reliance on MDMP to facilitate learning within the curriculum of the CGSC raises further concerns. Are commanders being equipped with modes of thought, or with concrete tools?

“Thinking In Time”

Two Harvard University Professors have teamed up to write a book entitled, “Thinking in Time” (Neustadt and May 1988). This book grew out of a course that they have offered at Harvard for over a decade now. The course is attended by military officers, interagency officials and political appointees who are entering high ranking positions in the government. They address the way decision makers have approached problems throughout the twentieth century history of the United States. They look at decisions that were made, and why they were made. Through this analysis they have come to some very interesting conclusions regarding decision making processes – specifically those based on the use of historical analogies.

Examples that they used spanned events from the Administration of Franklin Roosevelt to Ronald Reagan. For example, in looking at the Cuban missile crisis they show how case studies were used to inform judgment. Some presidential advisors tried to parallel the events in Cuba to Pearl Harbor and make a case that we should respond with devastating force immediately so that we could avoid such a disastrous surprise attack once more. Fortunately cooler heads prevailed, and the limitations of that analogy were illuminated. By further exploring historically similar events, and taking advantage of the experience of the people in the room, Kennedy was able to bring this situation to a peaceful resolution (Neustadt and May 1988).

Comparisons based on case studies have also led to poor decisions. In the case of the decision for the US to become involved in the Korean War we see advisors who only looked at similarities and not at the differences. When the North Koreans invaded to the south, Truman's advisors immediately drew parallels to the events of the 1930's that eventually lead to the Second World War (Neustadt and May 1988, 36). They saw this invasion as the equivalent of the German annexation of territories and the Japanese seizure of Manchuria (Neustadt and May 1988, 41). This was done without examination of the differences with regard to the present situation – a civil war, the role of China, and the cold war context of foreign relations (Neustadt and May 1988).

Their greatest conclusions focus on the flawed use the historical analogy process and the desire to make problems fit perfectly into the pattern exhibited by selected historical examples of similar cases. They found that more often than not leaders fell into traps and made poor decisions based on their reliance on the similarities in these

situations while ignoring the differences. More than anything else, the inability of leaders to depart from these foundations led to poor decisions (Neustadt and May 1988).

This should serve as a warning for institutions such as CGSC that strive to produce the leaders who will make many of the same decisions in the twenty-first century. Leaders must be free from the shackles (as Hegel would say) of processes and ways of thinking. According to Neustadt and May, they must become independent thinkers who understand the foundation, but are not afraid to deviate.

Paul and Elder

The curriculum regarding critical thinking at CGSC is based on the work of Doctors Richard Paul and Linda Elder. In some ways this in itself is a shame. Paul and Elder do not elucidate anything that cannot be found in the writings of classical philosophers such as the ones referenced earlier in this thesis. The author feels that the reliance on this “pop-culture” regurgitation of philosophy should be seen as an insult to the intellect of students at CGSC who should be able to understand these tenets based on their own interrogation of original works.

Part of the problem however is the wide range of students at CGSC. Universal ILE has resulted in a wide swath of educational backgrounds and motivations that must be accounted for in the development of curriculum. This could be remedied through the expansion of the curriculum so that learning objectives can be accomplished through a variety of courses rather than the present reliance on a core curriculum that is prescriptive in nature. The Naval War College (NWC) does this with their ILE. They offer a course on the foundations of moral obligations, this is a class that is traditionally sought after by students and based on classical philosophy (Brennan 1992). This should serve as

evidence that military schools can effectively utilize classical academic writings in their course of instruction.

The basis of Paul and Elder's work is laid out in chapter one of this thesis. They approach critical thinking through the creation of the elements of thought and how these are then applied to critical thinking (Paul and Elder 2001). How well these processes are then built into the curriculum will be further explored in chapter four.

Knowledge Production

It is useful to consider knowledge as something that is produced. Paramount to its production, according to a realist approach to these processes, is critical thought.

Understanding of how meaning is acquired is referred to as "hermeneutics." Students bring to their study a frame of understanding. The materials to which students are exposed also bring with them the frame of understanding of the author of the particular piece in question. This results in the need to understand what is termed a "double hermeneutic" (Sayer 1992, 35). This is because the resulting knowledge is based on two experiences which must be understood within their context. Often the frame of reference of the student is overlooked in such studies, however "we cannot approach the text with an empty mind in the hope of understanding it in an unmediated fashion, for our own frame of meaning is an indispensable tool or resource for understanding" (Sayer 1992, 36).

Most officers enrolled in CGSC bring with them a frame of reference based on their past experiences, which in most cases are fairly similar. This can lead to what is termed a "system of domination" (Sayer 1992, 34). In other words, the school is developed around the same frame of reference that has influenced the development of the

students over the courses of their careers. In some regards this is counterproductive to the development of critical thinkers. It can be argued that, perhaps, by introducing a more critical analysis of the subject matter, the school can force students to explore the nature of their profession and determine on their own the most productive and insightful approaches to problems. Sayer states, “to criticize an idea as false is not to deny that it is held or that it has consequences” (Sayer 1992, 39). Indeed it can be argued that to acquire understanding of “social phenomena” such as the curriculum of CGSC – and by extension the doctrine of the United Armed Forces - we must introduce criticism of both the doctrine and our understanding (Sayer 1992).

Academic Development

Within the literature regarding academic development, Thomas Kuhn, a Harvard educated philosopher and author of the seminal “Structure of Scientific Revolutions” argues that science follows a paradigm approach, that is, it trains new practitioners to apply knowledge, which has been previously produced (Johnston 1997, 14). Barry Barnes, another noted social science philosopher and author of “Scientific Knowledge: A Sociological Analysis” counters that this places disciplines in a rut, which then reduces the ability of the discipline to move forward (Johnston 1997, 14). This thesis will adhere more closely with the thoughts of Barnes and advocates CGSC must break the paradigm and produce leaders who are free thinkers willing to approach problems from novel directions so that the Army can remain relevant and dominant on the battlefields of the future.

Teaching Critical Thinking

Stephen Brookfield is a professor of Adult Education at Columbia University. He has written a book entitled, “Developing Critical Thinkers: Challenging Adults to Explore Alternative Ways of Thinking and Acting” (Brookfield 1987). Brookfield explains some of the difficulty that is experienced when attempting to develop critical thinking in adults. Unlike undergraduate students, adults bring with them life experiences, and models for decision making and for thinking (Brookfield 1987). Overcoming these impediments requires significant action on the part of instructors.

Brookfield introduces several techniques for fostering critical thought through teaching. Some include; Shor’s “critical teaching,” and Gamson and Associates’ “liberating education” (Brookfield 1987, 80). These ideas all stress the need to remove barriers from thought. Even structures commonly found in undergraduate classrooms, such as a reliance on grading and standardization, have a negative effect when it comes to adult education. Adults must be pushed extra hard to break away from accepted norms and to critically challenge the perspective that they bring with them to the classroom.

According to Brookfield teachers must facilitate the process of critical thinking within the structure of the classroom. He states, “this ‘deconstruction’ of curricula, textbooks, and modes of evaluation so that students become skeptical of divinely ordained moral and behavioral ‘givens’ is central to the task of critical helping” (Brookfield 1987, 81). Adults bring with them to the educational process ideas of what “right looks like.” These ideas must be challenged – they may be correct, and the student may go back to using these ideas as guides – but they will go back with a greater understanding for having tipped these ideas on their head.

“Challenge is central to helping people think critically” (Brookfield 1987, 90). Mentors, teachers and advisors must seek to challenge the assumptions of their students. This seems to be particularly lacking in the curriculum at CGSC. Rather than challenge students to ‘think outside of the box’ CGSC reinforces the box through the reliance on established processes and strict grading rubrics. Instead of providing students with a structure for solving problems, Brookfield argues that the structure must be eliminated so that students are forced to solve the problems on their own. This in turn can produce not only critical thinkers – but new knowledge (Brookfield 1987).

Power of Paradigms

Roderick R. Hindery is a distinguished professor in the area of social and comparative ethics. He has published a book entitled, “Indoctrination and Self Deception or Free and Critical Thought?” (Hindery 2001). He suggests that people who have become part of organization steeped in tradition and doctrine – primarily he is talking about religious groups – often become so indoctrinated in these ideas that they do not even realize that they are not exercising critical thought (Hindery 2001). Hindery contends essentially that group think causes the individuals within such organizations to delude themselves into believing they are thinking freely when in fact their thought is contained in limits imposed by the dogma of the organization (Hindery 2001).

Guidance from the Chairman of the Joint Chiefs

The CGSC is not the only school providing what is termed Intermediate Level Education (ILE) as part of the Department of Defense’s Officer Professional Military Education Policy (OPMEP). The Chairman of the Joint Chiefs of Staff in CJCSI

1800.01C dated 22 December 2005 has enumerated the goals for the Armed Forces with regard to OPMEP. This publication states that “PME provides the education needed to complement training, experience, and self-improvement to produce the most professionally competent individual possible” (DOD 2005). This document goes on to state,

“In its broadest conception, education conveys general bodies of knowledge and develops habits of mind applicable to a broad spectrum of endeavors. At its highest levels and in its purest form, education fosters breadth of view, diverse perspectives and critical analysis, abstract reasoning, comfort with ambiguity and uncertainty, and innovative thinking, particularly with respect to complex, non-linear problems. This contrasts with training, which focuses on the instruction of personnel to enhance their capability to perform specific functions and tasks.”

(DOD 2005, A-1, A-2)

The Chairman’s instruction provides useful benchmarks and delineation of functions which can be applied to the course work here at CGSS.

Training versus Education

The Army defines training and education in FM 7-0, Training the Force (Department of the Army 2007). According to this document education “enables judgment and creativity” while training “enables action” (Department of the Army 2007, 3-2). This document goes on to state that “training uses a crawl-walk-run approach that systematically builds on the successful performance of each task” (Department of the Army 2007, 3-5). Training is the ‘what’ to think. Education “provides intellectual constructs and principles so trained skills can be applied beyond a standard situation to gain a desired result” (Department of the Army 2007, 3-6). This is the enabling of

thinking. The Army makes clear that there exists a difference in these terms, and a different end result for both functions.

Is CGSC then an institution for training or for education? The mission statement for the school states the following:

“The US Army Command and General Staff College educates and develops leaders for full spectrum joint, interagency and multinational operations; acts as lead agent for the Army’s leader development program; and advances the art and science of the profession of arms in support of Army operational requirements.”

Further, the same document lists as part of CGSCs vision,

- *Educational center of excellence.*
- *Renowned for study of leadership, conduct of land warfare, and the synchronization and application of all elements of power.*
- *Supporting field commanders with well-trained and well-educated leaders, research in the professional body of knowledge, and reach-back planning.*

And, the first listed Strategic priority in this document is to:

- *Educate and train the students to ensure successful graduates can lead teams and solve complex problems throughout the spectrum of operations.*
(CGSC 2007)

By these definitions it is evident that CGSC is an educational institution. However, at times, the practice found in its curriculum and teaching would indicate that it deviates toward more of a training mission and mindset.

Leaders at CGSC make the case that there is actually a balance that is struck between training and education. Common is reference to the saying put forth by COL William Raymond, the Director of CGSS, “we train for certainty and educate for uncertainty” (Raymond 2008). The Dean of academics echoes this view when he points

out that given the technological advances of the Army we must train leaders in some of the tools they will encounter so that they can make the decisions to employ these tools in the most appropriate manner (King 2008).

Army Training Model

Stephen Brookfield explains that, “we are frequently caught within our own constructed and narrowly constraining paradigms – that is, the frameworks of understanding through which we make sense of the world” (Brookfield 1987). For the Army, this paradigm is defined in our doctrine. As an institution the Army has developed a model for training. This model provides the basis for all training throughout the three identified training domains – operational, institutional, and self-development (Department of the Army 2007, 3-2).

By this methodology the Army identifies training needs based on mission requirements. The manual on “Training the Force” lays out a very detailed process that traces all training goals to mission requirements through a “Mission Essential Task List cross-walk” (Department of the Army 2007). Training is then developed that targets these elements.

The problem with this methodology is that it only targets known requirements, to the great detriment of the unknown. Many critics through history have claimed that the Army as an institution trains to fight the last war. In today’s environment there is a desire and tendency for the Army to place all of its weight behind training to win in the current conflicts in Iraq and Afghanistan. While this is important, we must also be prepared for the uncertainty of future conflicts.

This is the area in which education can have the greatest impact. Unfortunately there is institutional inertia that propels the school toward the training model. The majority of instructors at the school come from careers in the Army. As such the paradigm that they understand is that espoused by training doctrine. Even when they attempt to switch to an educational mode, literature suggests that group think, and grounding in a common method draw the institution toward this paradigm (Brookfield 1987) (Hindery 2001).

Faculty Development Program

The faculty development program (FDP) at CGSC occurs in three parts. The first part, FDP 1, is a combined class made up of the new instructors from each department. The second part, FDP 2, is specific to the individual departments and provides new instructors with the basics of what that department's core curriculum is. The final part, FDP 3, occurs continually and involves both new and old instructors with the intention of continuing the learning of the faculty (Raymond 2008).

The focus of FDP 1 is of greatest interest to this thesis. Through this program of instruction new faculty members are introduced to several ideas and theories on teaching adult learners. Additionally they are also instructed on what to look for in grading both written and oral requirements.

Readings assigned for new instructors cover a variety of subjects to include experimental learning (Conner 2008), team teaching (Shafer 2001), and how to overcome barriers to learning (Christensen, Garvin and Sweet 1991). These readings and lessons serve to educate faculty on the techniques and theories that the college desires its faculty to utilize.

Absent from this program of study is any detailed analysis of developing critical thought. The only mention of this concept comes with the introduction of Paul and Elders “Miniature Guide” (Paul and Elder 2001). This is essentially the same reading and instruction that is given to the students. It would seem appropriate to include some more advanced readings given the importance that the college place of developing this trait in its graduates.

Basis for Analysis

Through this literature review several things have been established. The nature of what constitutes critical thought is seen through the writings of scholars through the ages. The role of critical thought in the development of military theory has also been shown. Analysis of how these ideas have been brought to CGSC and the manner in which it is introduced to students and incorporated into the curriculum has also been introduced.

The debate between training and education is framed in the context of Army doctrine, current academic thought, and the opinions of the administration at CGSC. This debate is far from being over and the clearest point to draw from it is that there is a balance that must be maintained between the two ideas. That this institution is concerned with adult education is established in the faculty development curriculum utilized by the college.

It can be argued that the adherence to techniques advocated by literature on adult education remains questionable. The next chapter will focus in on this area. If CGSC is seeking to educate adults, is it doing all in its power to knock down dominant paradigms and offer the opportunities necessary to allow free and critical thought to occur? Such thought should begin with a questioning of doctrine, processes and how and why it has

developed as it has. Brookfield stated that challenge is the key to developing critical thought (Brookfield 1987). And Hegel argues that reason does not need the conditions of processes to work effectively (Hegel 1902). Chapter four will examine this more closely in hopes of discovering avenues for the college to challenge itself and more graduates closer to being more critical in their approach and more complete in their understanding.

CHAPTER 3

RESEARCH METHODOLOGY

“To make judgments about method it helps considerably if we have some idea of the nature of the relationship between ourselves and that which we seek to understand.”

- Andrew Sayer (Sayer 1992, 12)

This thesis topic falls in the realm of social science research. Social because “the research subject involves people; how they act, think, and feel, and how they interact with one another” (Singleton, et al. 1988, 7). In this case the people are the students and faculty of the CGSC. This work is scientific because it is based on “empirical” or observed research (Singleton, et al. 1988, 7). The object of study is primarily the production of knowledge. This thesis is specifically interested in exploring the ways in which knowledge production is influenced and facilitated through the integration of critical thinking. Critical thinking is seen in two ways, first as a concept taught to, and encouraged in students. Secondly, as a perspective built into the curriculum itself. Based on this understanding, this thesis is situated at the nexus of the philosophy of knowledge production, the study of education, and anthropology.

The philosophy of knowledge production is interested in how it is that people engage in learning and in developing their minds and thinking ability. It is firmly rooted in many of the works introduced in the literature review. Knowledge production is the subject of classical thought that virtually stretches throughout recorded history. Obviously for the sake of brevity this thesis will only scratch the surface of this prodigious body of literature.

Education is addressed in the sense that this thesis is also concerned with the practical application of classical thought in the classroom environment. The topic of this thesis relates to not only the curriculum, but also the instructors and the students who are the human agents and therefore form the filter through which the curriculum is developed, communicated, and understood.

Finally, there is a strong dose of anthropology in this thesis as well. CGSC is an organization, and as such it has processes, a structure, and even a culture of its own. It is influenced by a multitude of sources. As has already been established, these sources include, but are not limited to, the Department of Defense, the Army, the field of academia, and the prejudices and agendas of those who are part of the process.

Anthropology is concerned with the “social and cultural development and behavior of man” (American Heritage 1970). This thesis seeks to examine the role of CGSC in the social and cultural development of midcareer officers in the armed forces of the United States, specifically through the medium of critical thought, which as was shown in the introduction, forms a focal point within the mission of this school. One of the interesting perspectives on this comes in the role of social reproduction of dominant paradigms from the active force to the classroom environment. Social reproduction is the idea that social relations and ideas are transformed over space and time through both material and discursive means (R. Johnston 2000, 760).

Realist Approach

This thesis will follow the realist approach to social science. Andrew Sayer in “Method in Social Science” (Sayer 1992) explains that realism is a philosophy, and should not be confused with a social theory (Sayer 1992, 4). As such it is a critical

methodology that is not restricted in the manner by which it explores the subject matter which it studies.

A realist approach recognizes that “social phenomena such as actions, texts, and institutions are concept dependent” (Sayer 1992, 6). This is appropriate in a study of CGSC which is very much a construct of a variety of societal inputs ranging from Army Regulations, federal laws, accreditation requirements and the personalities of those directly involved in the institution, such as students, faculty and staff. It also addresses the issues brought forth by the impact of social reproduction of the field army within the institutional army.

Sayer cautions that within this approach the researcher must remain “critical of the object” (Sayer 1992, 6). This is to say that for the researcher to be successful in explaining what it is that they are observing and explaining they must ensure that their evaluation is critically based (Sayer 1992, 6). It is a common danger that researchers will identify with or otherwise accept processes or concepts associated with the object of study. A realist approach cautions against this, calling on the researcher to critically analyze everything, to include their own a priori assumptions.

In keeping with this tradition this thesis will seek to apply a critical eye to the process of inculcating students in the development of critical thinking. This is an important point to consider, it is a given that the College is currently developing critical thinking within its students, there are undoubtedly many good practices and processes currently in place. Utilizing the realist approach, this thesis will seek however, to critically analyze all processes involved in an attempt to ascertain alternative approaches that may be even more effective in producing critical thinkers.

The Nature of Social Inquiry

After situating this thesis within the rubric of social science, and identifying the utilization of a realist approach, the method in which research will be conducted must be considered. In their book, “Approaches to Social Research,” Singleton, Straits, Straits, and McAllister detail the various methodologies available to the researcher (Singleton, et al. 1988). They identify four approaches that are appropriate for this type of inquiry, “experiments, surveys, field research and the use of available data” (Singleton, et al. 1988, 7). This thesis will utilize the latter two approaches.

Experiments were ruled out as an approach for this study early on based on the feasibility of this type of examination. Effective experimentation with the curriculum would require the establishment of formal test case studies. These studies in all probability would involve issues that would need to be cleared with the various accreditation committees and multiple levels of bureaucracy. Additionally such test cases would require a much longer study than the 10 month period of the course in which the author is enrolled. Although such experimentation could prove to be beneficial, this would require an effort from the school which clearly falls beyond the scope and authority of this project.

Surveys were considered, but ultimately ruled out as a technique for several reasons. First, the student body at CGSC is subjected to multiple surveys over the course of the year. This leads to “survey fatigue” and difficulty in ensuring adequate participation. Concern would also need to be applied to the process of creating and managing an appropriate sample. The author was also concerned about the results produced by such surveys and the meaning that could be established as a result. One of

the contentions of this thesis is that critical thinking is often suppressed at an institutional level through what has been described as, “indoctrination and self deception” (Hindery 2001). That is to say, some options may not even enter the realm of consideration because of their foreign nature to the students enrolled. Ultimately, it was determined that surveys would be overly cumbersome and would not necessarily produce analysis which would be useful to this project.

The third option offered by Singleton et al, field research, offers by far the best avenue for proceeding. In the context of this project, field research is accomplished through the participation of the author in the process as a student at CGSC. This approach gets right at the heart of the nature of empiricism. Empiricism is, “a way of knowing or understanding the world that relies directly or indirectly on what we experience through our senses: sight, hearing, taste, smell, and touch” (Singleton, et al. 1988, 31). By actively participating in the process of education both at CGSC and at other academic institutions, the author has gained a unique perspective from which to situate the production of knowledge. These observations will be buttressed and augmented through the use of selected interviews of people associated with CGSC who play a role in course and curriculum development. The purpose of these interviews will be to further explore the vision that these individuals have for the development of officers, and the emphasis that they feel should be given to critical thinking. Additionally interviews with officials from other PME institutions as well as members of some of the accreditation committees will assist in rounding out the perspective. Field research will be the primary tool utilized by this research.

Utilizing available data will also be used to approach this topic. Primarily this will take the form of the literature review provided earlier in chapter two. Situating the topic in this manner allows the exploration of the philosophy of knowledge production. By tracing critical thinking as a concept through the history of thought, arguments can be made on how this foundation is being utilized in the curriculum found at the CGSC. The literature review also highlights many of the concepts and terms that will be employed throughout this thesis and provides grounding for the observations in chapter four and the conclusions and recommendations in chapter five.

Qualifications / context of field research

Based on the strong reliance of field research for this thesis, it is important to contextualize the particular experience from which the author has gained his perspective on the research subject. This contextualization is in line with Sayer's caution that all findings must be understood by first acknowledging the "researcher's own frame of meaning" (Sayer 1992, 6). It is also in line with combating "native egocentrism" (Paul and Elder 2004, 6) as described in chapter one. It is a given that the perspective of the author is biased on a number of factors, to include his background, the students in class with him and the instructors who formed his particular teaching team.

Currently the author is a student in the CGSS. He started the course in August of 2007 as part of Staff Group 9C. This staff group is comprised of fifteen officers; to include one Air Force, one Naval, and one international officer from Malaysia. The Army students within the staff group include members of the following branches: Aviation, Signal Corps, Armor, Civil Affairs, Infantry, Adjutant Generals Corps,

Ordinance, Military Intelligence, Quartermaster, Engineer, Chemical and Field Artillery. This mix of students is fairly typical of that found throughout CGSC.

Atypical of the norm is the mix of instructors assigned to this small group. Currently of the five primary instructors (from the Center for Army Tactics (CTAC), Department of Logistics and Resource Operations (DLRO), Department of Command and Leadership (DCL), Department of Joint, Interagency, and Multinational Operations (DJIMO), and the Department of Military History (DMH)), three are active duty military officers. Two of the instructors are from the Army and one from the Marine Corps. In other staff groups they usually only have contact with one active duty officer at the most. It should also be noted, however, that one of the Army officers replaced a civilian instructor very late in the year.

The author's experience also was shaped by participation in the graduate degree program in the pursuit of a Masters degree in Military Arts and Sciences, as well as the electives that he was enrolled in. Among the elective choices, two are fairly atypical of the CGSC experience. First, a special elective in Strategic Communication offered by DJIMO in response to a request to leverage the intellectual capital of the armed forces by the Deputy Secretary of Defense. This involved the writing of a significant fact paper for the DOD and included the opportunity to spend a week in Washington DC interviewing leaders at the Pentagon, State Department, Capitol Hill and the White House. The second atypical class was a joint venture with Kansas University offered by DCL on the Media and the Military. This elective allowed CGSC students to interact with journalism students and faculty from Kansas University to build better understandings of how each group approaches their jobs, and how this then shapes their understanding. Both of these

electives, it should be noted, allowed for maximum use of critical thought and represent great examples of what can be done in an adult educational environment, in the opinion of the author of this thesis.

Case study comparison is also constructed through the author's experience as a graduate student in the Department of Geography at the University of North Carolina (UNC), Chapel Hill. For two years, encompassing the academic years of 2002 and 2004, the author attended classes and wrote a thesis within that department. Entering that program in September of 2002, he was one of six students in the department's cohort. This was a vastly different experience from CGSC primarily differing in the latitude given to students to pursue research interests, the personalized attention from the faculty and the lack of structure in the academic routine.

In addition to these two experiences as a student, the author also draws on his experience as an Instructor and later Assistant Professor of Geography at the United States Military Academy at West Point. In these positions the author dealt with course development, exam construction and grading of student work. He was one of multiple faculty members who team taught Physical Geography – which is a core course at West Point which the entire yearling (sophomore) class must take. From this experience he does have an idea of the friction involved in coordinating a class that is presented in a small group environment to over 500 students simultaneously. The author also served as course director for several elective classes offered at the academy.

All of these experiences influence the perspective from which the author views the issues. Field research provides some of the most dynamic research results, but also some of the most biased (Singleton, et al. 1988). As discussed in chapter one, these

biases undoubtedly exist within this thesis. The discussion and detailing of the author's experiences in this chapter should serve to present these biases to the reader and contextualize the discovery that takes place as a result of this research methodology.

CHAPTER 4

ANALYSIS

The Command and General Staff College is required to develop a curriculum that supports the training and education of mid-career officers. To accomplish this mission, the College receives guidance from a variety of sources. The Chairman of the Joint Chiefs of Staff, through the Officer Professional Military Education Policy, delineates what are known as ‘standards’ and ‘learning objectives’ applicable to officers in a joint environment. The US Army, through TRADOC, provides guidelines that it suggests to meet the needs of the organization. Further, the accreditation of the College’s degree granting programs requires approval from a civilian regional accrediting association that checks to ensure that standards in teaching and learning are being maintained. All of these requirements form the parameters within which the terminal learning objectives (TLOs) are then framed by the Commandant and Deputy Commandant at CGSC.

The Dean of Academics, Dr. Wendell C. King (Brigadier General Retired), has the responsibility of ensuring all of the above are translated into a workable curriculum that can be implemented by the faculty. When asked where he saw the role of the College to be – either training or education - King stated that the role of CGSC is primarily one of education. Adaptive leaders need to have a basis in critical thinking and an understanding of the reasons behind doctrine (King 2008). There is also a balance that must be struck with training, especially with regard to technological innovations (King 2008). As military history illuminates, changing technologies have always had an impact on the training of a force. This remains the same today as it was sixty years ago. To

orchestrate this balance, King has a robust faculty that boasts a four to one ratio with students.

Command and General Staff School

Within CGSC, the Command and General Staff School is the division that houses the various departments that educate the students enrolled in ILE. COL William Raymond is the Director of CGSS and has had experience as the Director of CTAC prior to his current assignment. As previously mentioned, Raymond sees the mission of CGSS as striking the balance between training and education to produce leaders that are equipped to operate in the Army as adaptive leaders who are versed in the capabilities of the force. He states that this is a twofold mission – “we train for certainty and we educate for uncertainty” (Raymond 2008). In this role the faculty has the onus to ensure that critical thinking is fostered while knowledge is imparted that will be needed by leaders in the field.

The Deputy Commandant provides the faculty with learning objectives that are largely a result of the requirements placed on the school by the outside agencies enumerated above. COL Raymond maintains that the faculty then has the flexibility to present the material in a manner which suits their individual teaching styles. Where they do not have flexibility is in adjustment of the objectives or in the assessment tools used to determine the success of the school in reaching those objectives (Raymond 2008).

Department of Military History

Charged with maintaining three courses that run sequentially, in parallel with the core curriculum, DMH in many ways best espouses the ideals of critical thinking as

envisioned by Paul and Elder. Each of the three courses causes students to engage with history and develop an appreciation for the development of military thought, practice and weapons. Exposures to little known periods of history that have similarities to the Contemporary Operating Environment (COE) enhance the interest and stimulate the engagement of students with this material.

Of particular note is the H200 block of instruction. This course looks at the period between the First and Second World Wars. By examining the development of tactics and the production of weapons within this time frame, students gain an appreciation not only of success stories, but also mis-steps. This is further enhanced by providing not only the perspective of the United States, but also that of Great Britain, Germany and France as well as a few other minor case studies. This period in history was one of uncertainty as the US struggled to adjust to its new role in the world. Many parallels with the COE can be drawn as the US once more adapts to a new role, and many lessons can be gained that are applicable to today's leaders.

Assessment within the history curriculum is primarily in the form of class participation and an essay. It was extremely unfortunate that the essay for H200 was canceled. The author's staff group was informed that this was due to perceived over-burdening of students. Removal of this requirement did allow DMH to experiment with blogging as they assigned students to prepare a blog and post it on a military history blog site as a substitute requirement. This was a tremendous opportunity lost to build on what was the most dynamic block of the curriculum. The essay would have served to further synthesize the material that had been read and discussed in class in ways that in the author's opinion the blog failed to do.

A common complaint with regard to the H100 essay was a lack of definition for the term 'history'. Many essays were returned with the comment that the essay, while answering the question asked, was not what DMH considered 'historical.' This was further exacerbated by the apparent desire for a particular type of history. In the author's experience, an essay that was focused on the history of geographic thought featuring the historic evolution of the nation-state, was deemed to be inappropriate for this requirement even though, by the graders own admission, it completely answered the asked question. This is an example of how some of the requirements imposed on assessments serve to limit critical thought to a narrow band. Less emphasis on specific answers and more emphasis on logical reasoning in response to the proffered question would help to remedy this situation. Subsequent requirements were clearer in this delineation.

Dr. Jim Willbanks, the Director of DMH cautions that the current focus on critical thinking within the College should not be seen as a panacea for all of its problems (Willbanks 2008). He feels that the approach DMH utilizes, while not fully embracing the framework of Paul and Elder, none the less serves to stimulate critical thought. This is an excellent point, and it is heard elsewhere as well, that critical thinking needs to be contextualized not as a process, such as the methodology of Paul and Elder, but as a more generalized concept.

Department of Command and Leadership

As with History, DCL runs two courses in parallel with the core curriculum. The formal class on critical thinking that fits into the core curriculum itself is also developed by this department. The L100 and L200 courses are set up to facilitate discussions on a range of topics regarding ethics, leadership, negotiations and the like. Although these

discussions were always engaging and informative, they had a certain pop-culture attitude about them. Some of this was gained from adopting models such as Paul and Elder, and some was from the constant drive to find new case studies that it was felt students could identify with more easily (Thomas 2008). As shown in the literature review of this thesis, the ideas of critical thinking are not new. They have been around since the classical times marked by luminaries such as Socrates and Plato. Likewise, the range of case studies is infinite and it may not always be true that newer case studies are more effective.

The assessments for these courses were done through class participation and essays. Two essays were assigned for each block of instruction. In each case, the first essay was extremely broad in nature, and would ask for the student's philosophy on a particular issue. The second essay would be more specific and ask the students to reflect on a concept or pair of concepts and explain them utilizing the case studies introduced in the course. One troubling aspect of these assessments was the use of grading rubrics. This was especially true in the L200 essay.

In the example of the L200 final essay, the first essay question asked students: "from a leadership perspective, what are the greatest differences in the application of Battle Command in a COIN environment versus major combat operations?" The question is a great one with a range of possible responses and case studies from which to draw examples. However, the accompanying rubric made it impossible to award points if a student were to argue that there was no difference in the application of battle command between these two environments. It can be argued that such a premise – that there is no difference - could be built and defended, even using the case studies utilized in the

course. The tenets of critical thought would argue that if such a case were properly buttressed with logical arguments, then it should be acceptable. The grading rubric would say otherwise.

This is another poignant example of how critical thinking is inadvertently stifled in CGSC. Operating from a dominant paradigm that believes there to be a difference between a COIN environment and major combat operations, perspectives that would see it otherwise are not considered. This is very relevant in a force that is struggling with these concepts. In an institution such as CGSC should not every avenue and perspective be explored that could lead to greater fidelity as to the current situation of the Army?

Dr. Thomas, the Director of the DCL, sees the importance of critical thinking and believes that his department is making strides at incorporating the concept within its curriculum (Thomas 2008). He also acknowledges that there are further steps that can be taken such as the incorporation of non-US case studies as advocated by the PAJE team report (Thomas 2008) (PAJE Team 2008). Further, the department is still experimenting with the balance between the need for assessments and the maintenance of critical thought.

Department of Logistics and Resource Operations

Tasked with instructing the students in a variety of subjects ranging from battlefield logistics to procurement, DLRO has responsibility for one block of core curriculum classes (F100) and also facilitates the exercises that take place throughout the year. COL Joyce DiMarco, the director of this department is a proponent of utilizing the curriculum for developing critical thinking. She states that there are significant challenges within the context of the CGSC experience, to ensuring a balance is kept that

facilitates critical thought while simultaneously imparting the knowledge that is mandated by outside sources (DiMarco 2008).

In the experience of the Author, classes within the DLRO curriculum were often extremely structured and the instructor was not able to support a discussion that lead away from the primary points of the lesson. In the case of the author this was further exacerbated by the manner in which the instructor divided the readings. In an attempt to lighten the reading load he piecemealed the required reading to different groups within the small group. This resulted in no one having the depth of knowledge required to adequately understand the material presented. Many teaching techniques would show this to be flawed based on the lack of a common base for the entire class.

Likewise, as expressed in the introduction with regard to the author's experience, grading within this department was apparently extremely capricious and not based on set criteria nor on the logic of proffered arguments. When the logistic estimate prepared by the author's section was returned and the instructor stated that he would not allow the group to "redo" the work, nor would he meet on an individual basis with students to discuss this work further, it seemed that neither the desired endstate of critical thought nor a solid training foundation was established.

COL DiMarco's explanation of her teaching philosophy and her guidance to instructors within that department suggests that the author's experience may have been an anomaly. Her philosophy for teaching is that instructors should facilitate the learning experience for students by tapping into the personality and experience of the classes (DiMarco 2008). The curriculum developer for DLRO, Mr. Ken Long, reinforced this vision. Long explained that the department has always operated under the concept of

‘mission command.’ By this system instructors are given general guidance – primarily in the form of learning objectives – but then provided the latitude needed to deviate as the needs of the particular classes varied (Long 2008).

Department of Joint, Interagency, and Multinational Operations

Unlike the other departments, DJIMO has a much broader curriculum responsibility. This department plays a larger role throughout the core curriculum and is directly tied to accomplishment of many of the PAJE requirements as outlined in the OPMEP. COL Weaver, the director, desires to have critical thinking seamlessly imbedded throughout the course work (Weaver 2008). However, harkening back to the training versus education dichotomy, he also sees CGSC as a “practical school” that needs to be grounded in producing leaders who can work in the real world (Weaver 2008).

The experience of the author indicates that in fact this department did in excellent job at introducing new ideas and providing the students with multiple perspectives from which to develop an understanding of complex roles and missions. Much of the work was centered on original sources and developing the meaning of these theories and doctrines in the contemporary operating environment.

One area of consternation occurred in the context of the “Okinawa” exam. For this requirement students were given source documents that showed the considerations that were weighed in the planning for the World War II assault on the Japanese held island of Okinawa. This exercise did an excellent job of causing the student to pull in all of the knowledge garnered over the preceding weeks, and had them look at a real world problem. The issue arose in the structure of the questions. Initially broad questions were

assigned that would have caused students to really think through the situation and develop solutions and their supporting rationales. However, the department later took the step of handing out a follow-on clarification of the questions that served to limit the scope of possible answers. While this no doubt made grading easier, it could be argued that this had a deleterious effect on critical thinking. Given the general questions, students could apply critical thinking and develop unique solutions which they then could buttress through logical arguments on their own. Instead the questions, with the new sub-questions, ended up leading the student by the hand to the desired solution.

COL Weaver argues that this is necessary given the size of the classes and the need to ensure standardization across the course (Weaver 2008). However, it should be noted that there is a cost associated, and it is in the freedom for critical thought.

One suggestion that Weaver had for ensuring students are able to synthesize the material presented was the incorporation of a comprehensive exam for all students. This could serve to ensure that students have inculcated the knowledge in such a way as they are able to use it in a holistic manner that displays their level of aptitude (Weaver 2008).

One of the most beneficial parts of the DJIMO experience for the author was the daily interaction with fellow students and the instructor on the topic of current events. Within this curriculum, much more so than the others, current events and their impact on the topics being discussed and read about was brought into focus. This daily interaction truly fostered critical thought in ways that the structured study simply could not. As a result a level of synthesis was achieved that was without equal in the curriculum.

An area that could be improved upon is the leveraging of available assets. A prime example would be the inclusion of non US centric readings. This is a suggestion

for the entire college from the PAJE team accreditation report (PAJE Team 2008) and will be fully developed later in this chapter. Another common criticism is the lack of interagency instruction and interaction. It is often bemoaned that the school can not attract personnel from different governmental agencies for a variety of reasons.

PAJE team member Jennifer Walsh commented that the school is not doing enough to leverage the new technology that the Lewis and Clark Center has to offer. With every room equipped for teleconferencing there is no reason that requests could not be made for personnel from other agencies to be brought into the classroom in some creative and beneficial ways (Walsh 2008). By leveraging assets available and enabled by the school, DJIMO can bring more diverse and critical voices into the discussion that supports their learning objectives.

Center for Army Tactics

Similar to DJIMO, CTAC has broad responsibility within the curriculum for educating officers in the employment of Army formations primarily at the division and brigade combat team level. COL Robert Burns, the CTAC Director sees his mission as providing officers with the framework they need to operate in today's Army. Critical thinking must be done by each officer individually, it cannot be forced, only guided (Burns 2008).

In the author's experience, one of the best experiences for critical thought that was offered by CTAC was the Master Tactician Exam. It should be noted that similar exams for Master Strategist and Master Logistician were offered by DJIMO and DLRO respectively. The author did not directly participate in those exams, but they were similar in nature and scope.

The Master Tactician exam was completely voluntary and required the students involved to do rudimentary mission analysis on a situation in the days preceding the exam. At the actual exam students had four hours to come up with certain products. This exam was an exercise in individual preparation and thought, and required the student to put into action the entire CTAC curriculum. The unfortunate thing about this opportunity – and the other afore mentioned exams - was that it was voluntary and as a result only attracted a fraction of the class. Exercises similar to this should be mandatory for all students. This assessment tool was excellent in that it presented a broad problem and allowed students the flexibility to come up with a wide range of solutions. The time constraints further benefited this exercise because it caused students to make decisions on the priority of tasks.

COL Burns believes that one of the best ways to invigorate student discussion is to allow his faculty to have the maximum flexibility possible to tailor their classes to their strengths and to their student's weaknesses (Burns 2008). Indeed the freedom for faculty to deviate from the syllabus is perhaps greatest in this department. COL Burns has developed what he refers to as 'redlines' and these consist chiefly of those items mentioned by COL Raymond as being non-negotiable – assessments and learning objectives. Class structure however, was more attuned to the needs of students than to a schedule.

The division level exercise that is conducted under the auspices of CTAC, W299, is an example of an assessment exercise that is designed for the students to synthesize the material that they are exposed to in the curriculum. COL Burns pointed out that one of the failings of this exercise is the fact that there is only one iteration of each operation

(Burns 2008). He is currently working to alter this exercise so that students will have opportunities to 're-play' certain events so that they can incorporate lessons learned and develop a better understanding for how these missions are conducted. This would facilitate the education process as it will enable students to understand how their thought process broke down in the course of the operation.

Naval War College

The Naval War College approaches the development of critical thinking differently than CGSC. First, they have the benefit of co-locating the ILE equivalent (College of Naval Command and Staff) with the senior war college. This allows for joint seminars with a wider range of perspectives and opinions, and the ability to share faculty.

Faculty is one of the keys to the Navy's approach to critical thinking. Captain Bob Watts, US Navy Retired, served in numerous positions at the College, ending in the position of Deputy and Chief of Staff to the President. He credits the College for its ability to attract credentialed, published, senior professors from tenured track positions at prominent universities to join the intellectual community at Newport (Watts 2008). As already discussed, people like Professor Brennan from Columbia University have played a key role in developing courses and injecting academic rigor into the college (Brennan 1992).

Watts explains that by integrating these professors with military faculty the College achieves many of its goals. "This academic experience and expertise is critical to the stimulation of critical thinking and succeeds because their [the civilian professors] perceptions have not been pre-conditioned by years of military service that inevitably and naturally conditions career officers to adhere to the 'wisdom from above' in the chains of

command in which they have served” (Watts 2008). This is one of the ways in which the Navy overcomes the problem associated with dominant paradigms or innate sociocentrism as discussed by Paul and Elder (Paul and Elder 2004, 6).

Another area of difference comes in the development of courses. Rather than hiring faculty against courses in the curriculum, courses are built against the expertise of the faculty. Newport prefers this model of hiring faculty and then developing courses that fit their area of expertise. “The curriculum evolves and has evolved over time and will be shaped to capitalize on the strengths of a faculty chosen because they bring the requisite array of strengths and experience to it” (Watts 2008). In this way the classes are in line with the particular expertise of the professor. For example, rather than hire someone to teach H200 with its previously set readings and lecture topics, they would hire a professor and then build the readings and lecture topics around their strengths.

There are several significant differences between CGSC and NWC that must be acknowledged. The NWC ILE program only educates approximately twenty percent of the Navy’s eligible officer corps as opposed to the Army which presently educates one hundred percent of its eligible population. NWC also grants degrees to all of its graduates, as opposed to the voluntary master’s program at CGSC. It has been argued that this has significant impacts as a result of the level of motivation and, to a degree competence, of the students. This then has repercussions for the depth of instruction and discussion that takes place in the classroom.

Alternative Futures

How then can CGSC transform itself in ways that will increase the opportunities for critical thought? The notion of the CGSC experience as the military equivalent of

graduate school is a pervasive one within the school. However, the reality is quite different. The author was a graduate student for two years at the University of North Carolina at Chapel Hill. Given this perspective, there are a great many differences that appear between the two programs.

Obviously, CGSC has a different product that it is charged with producing. The geography program at UNC produces academics who primarily go on to teaching positions at universities across the country and around the world, while CGSC produces officers that go on to serve in the armed forces at mid career positions. When asked if he would characterize CGSC as a graduate school Dr. King responded by saying it is not a graduate school based in the arts and sciences, but more of a professional graduate school in line with business schools or law schools (King 2008). Unlike the author's experience at UNC, these schools are charged with developing specific skills in addition to stimulating and cultivating thought in the discipline. However, this should not negate the possibility to include some of the teaching techniques found at nationally renowned intellectual centers like UNC at CGSC.

One of the most obvious points of departure concerns the core curriculum at CGSC. All students are required to take the exact same courses, and they take them within the same small group throughout the course of the first seven months. This technique is advocated in sources such as "Education for Judgment" (Christensen, Garvin and Sweet 1991). CGSC utilizes this technique as the foundation of its class structure. This technique has advantages and disadvantages. As will be developed further later in this chapter, Dr. King has some reservations about the affect of team teaching on alignment of instructor skills. On the student side, perhaps an occasional change in the

composition of the group could serve to ensure students are exposed to a broader perspective by causing interaction with a larger range of peers. Additionally, most universities at both the undergraduate and graduate levels offer multiple courses that accomplish the same learning objectives. This provides a greater range of experiences to which individual students are exposed.

One benefit of altering the composition of the small groups lies in the fact that relationships between students are formed which often relegate students to identities within the group that are forged early on, and after a time may serve to reduce the participation of particular students based on their perceived 'place' within the class order. If the composition of the class is altered occasionally, then students will be encouraged to re-forge their identities and may result in increased participation.

Student interest in the subject matter is another problem with regard to creating a classroom environment conducive to learning. Some of this can be solved by allowing students to select classes that relate to their interests. It may even be advisable to create different levels of difficulty. Students that wish to be challenged by the course work should be provided with that opportunity. This could provide better opportunities to educate those students enrolled at this school. It could be argued that CGSC is overly concerned with standardization of the material. Some graduate schools have found success is empowering the students to direct their own educational experience. This is especially true in schools that are oriented in the disciplines of the liberal arts.

Increasing the course options would also serve to increase student interest in the curriculum by making it more applicable to their particular interests. For instance, when a student desires to get a master's degree in geography at UNC they are given an open

schedule into which they plug courses according to their own research interest. There are courses which are deemed to be required for all students, but again they are arranged according to individual schedules. This would also increase the faculty's ability to orient courses according to their own interests and strengths. It would enlarge the offerings to encompass a much broader realm of possibilities. This is done already with the electives program at CGSC. There are challenges to this proposal with regard to the core curriculum. Care would be needed when aligning such a system with the requirements resulting from the OPMEP and the Army as well as other accreditation sources, but perhaps there is room for some adjustment beyond the current system.

Example

Currently CGSS curriculum features Leadership as a core series of classes. What is truly presented here? Some would argue that they are merely case studies featuring problems and challenges that have been at the core of training at every level that officers have been exposed to over the course of their careers. The Naval War College in Newport offers officers an alternative. They call it the "Stockdale Course," and it is focused squarely on Military Ethics – and the foundations of moral obligations. This takes the basics of leadership instruction and forces students deeper. Through an examination of classical thought the course provides an academically rigorous course that imparts new knowledge and provokes a desire to learn more.

Grading

Students in graduate school at UNC do not receive grades beyond passing or failing. In an institution of higher learning attended by students who possessed the desire

and motivation for learning advocated by Plato this should seem to be sufficient. It has been argued that perhaps students at CGSC are not as academically motivated as this ideal would require. But some of this is due to the school's own rhetoric which stresses the experience as the "best year of your life." Part of the academic motivation problem also stems from the perception among students that everyone will pass unless they breach an ethical line.

If the school desired to create a more dynamic and 'enlightening' educational environment, it could be argued that eliminating the quantification of grades is one way this could be accomplished. Paradoxically tied to this is the need to make failure a real possibility. Students must understand that it is not a foregone conclusion that they will pass. This in turn could reduce the need for concepts such as grading rubrics. These tools, as suggested earlier in this thesis can serve – perhaps inadvertently - to limit critical thought.

COL DiMarco of DLRO offers that grades do play a role at CGSC. In her opinion the adult learning model does not work on all of the students enrolled at CGSC. Some need to have an assessment tool through which they can be influenced to maintain a level of engagement with the requirements and thus maintain the quality of learning for all students (DiMarco 2008). Dr Thomas of DCL echoes these remarks and further offers that a grading system is needed to ensure the recognition of the course work at CGSC in the eyes of other universities and colleges (Thomas 2008). COL Burns of CTAC was the only director to question the validity of the grading process within CGSC, believing that in the current system they were not very valuable tools at all (Burns 2008).

The Dean, Dr. King, feels that grades serve a twofold function. First, they keep the full student body motivated to learn. King fears some students would take advantage of a system in which no grades were assigned and not participate in the manner needed to foster dialogue within the small groups. Secondly, King sees grades as a vehicle to ensure that the school is doing what it needs to do in terms of serving the students. If grades drop, that may be an indication of a systemic problem in the curriculum or in faculty development (King 2008).

Nevertheless, if grades were not required, it could be argued that instructors could look at the products that are created by students in a more holistic fashion. Answers would not have to fit set criteria, but instead simply be buttressed by sound thinking. The faculty to student ratio at CGSC is very admirable and could facilitate much more one-on-one counseling than is currently the case. Students should be required to meet with faculty and discuss material turned in for classes. This one-on-one counseling could ensure that motivation levels are maintained and the learning environment is maintained.

Building and Maintaining a Faculty

To create enlightened officers, the faculty mentors must themselves be enlightened. Faculty should be hired and promoted based on their ability to reinforce the goals of the school. There is a mix that needs to be maintained between education and experience in faculty selection. Certainly success in military careers is one metric, but of equal importance is the selection of others – perhaps with little to no military experience, but who have a firm understanding of the subject matter from academic or business backgrounds.

Captain Watts suggested that the key to developing critical thought lay with the faculty. “[T]here is no tenure at the NWC, but faculty positions are so highly regarded that many of the civilian professors have left tenure track positions at other colleges to accept a teaching position at the NWC” (Watts 2008). Brookfield would agree with Watts’ evaluation. He placed much of the weight of developing critical thought squarely on the shoulders of the faculty and the need for ‘critical teaching’ (Brookfield 1987).

Watts further stated:

“The fundamental precept of the NWC that strengthens critical thinking is that the faculty is populated with over 40 civilian PhDs, all of whom have had substantial teaching experience at major American colleges/universities with proven, peer-reviewed research and publications to their credit. This academic experience and expertise is critical to the stimulation of critical thinking and succeeds because their perceptions have not been pre-conditioned by years of military service that inevitably and naturally conditions career officers to adhere to the ‘wisdom from above’ in the chains of command in which they have served. Indeed the requisite discipline and adherence to doctrine and procedures mitigates against critical thinking for much of a service career – and this is the key reason that C&GS [ILE] or Senior War College courses are so important to dispelling these early career notions and permitting more open-minded, critical approaches to issues that will be confronted as officers become assigned more elevated and vexing issues.”

(Watts 2008)

It must be noted that the NWC offers what could be seen as more desirable geographic situation and higher pay for their faculty.

Dr. King agrees that this mix does offer benefits to the curriculum and is taking steps to attract outside scholars to Leavenworth and also to encourage professional development of the faculty from within (King 2008). Some initiatives that King has spearheaded include partnership with local civilian universities to offer faculty an opportunity to continue their studies and earn doctorate degrees in appropriate fields. There are also numerous opportunities associated with the creation of chairs – both

endowed, such as the recently announced Powell Chair, and distinguished chairs within the departments. The special endowed chairs will be utilized to attract scholars from around the country who can serve as visiting professors that will enhance the curriculum. Distinguished chairs in the departments will serve to recognize outstanding scholarship within the college and encourage further research and publication by the current faculty (King 2008).

King cautioned that the Newport model is not without fault. Indeed the drive to find and hire faculty based on academic credentials alone can have adverse affects on the curriculum. According to King, faculty should be chosen based on their relevance to the prescribed curriculum (King 2008). Watts counters that bringing in diverse faculty also assists in ensuring that the curriculum evolves with time and changing academic approaches to knowledge production (Watts 2008). However, CGSC has additional constraints placed on it as a result of the need to produce ground forces officers who will be employed – and deployed - in the contemporary operating environment (COE) soon upon graduation. This creates the need to expose them to instructors who possess experience in this environment that they can impart to students through the curriculum.

Another constraint to allowing faculty to operate in their particular areas of expertise is the team teaching method practiced in CGSC. By this method a team is constructed by assembling one instructor from each department to serve a group of sixteen students. Each instructor is required to cover all of the classes in the curriculum that fall under their particular department's purview regardless of their particular strengths or experience. This method is highly advocated in literature regarding adult learning such as the Harvard Business School's "Education for Judgment: The Artistry of

Discussion Leadership” (Christensen, Garvin and Sweet 1991). However, according to King, it does have its limitations when it comes to ensuring each member of the team is instructing in an area in which they have depth of knowledge due to the breadth of the curriculum (King 2008).

The Military Decision Making Process

The Military Decision Making Process (MDMP) is a system that is utilized by the military to aid commanders and staffs in making decisions, primarily in operations. It has come under attack by many within as well as outside of the military profession for the manner in which it channels thought. However, advocates argue that it provides a framework for staffs to work within. They would say that the MDMP helps to frame a problem in manageable pieces.

Dr. King offers that MDMP forms a useful architecture with which to form thoughts on how to solve problems (King 2008). In this way MDMP is not an unbendable set of ideas, but a manner in which to frame the problem. COL Raymond, the Director of CGSS suggests that MDMP is constantly evolving. It is more than a rubric; it is an approach to problem solving that is meant to assist commanders in framing the problem (Raymond 2008).

COL Burns in CTAC admits that as a model, the MDMP is a ‘box,’ and while the Army is often trying to coax officers ‘out of the box,’ in some cases it is useful (Burns 2008). In an operational environment it is crucial that all of the players have a lingua franca – in this case the language is the MDMP (Burns 2008). LTC Mark Camarena, a CTAC instructor and School of Advanced Military Studies (SAMS) graduate states that

MDMP is not so much a process on how to think as it is a process that facilitates the production of products that are useful to commanders and staffs alike (Camarena 2008).

The school is also looking at an adaptive problem solving technique that would remove some of the rigidity from the process (King 2008). This program is currently being tested in the SAMS. There are, in fact, many other options out there to include the Marine Corps Planning Process, the British Army's seven questions, and numerous systems based approaches.

It is the position of this thesis that while the MDMP is a useful tool for Army leaders, it is by no means the only tool. Since CGSC has identified itself as an educational institution, why not allow experimentation to occur within its halls? It could very well be that students will come to the realization that the MDMP is the best process. Another outcome is that students will have greater understanding and appreciation for the goals of any decision making process.

Brookfield detailed the issues in adult education with what could be called the dominant paradigms that surface in classes as a result of adults' life experiences (Brookfield 1987, 81). This thesis argues that in a school such as CGSC, Army doctrine and processes like the MDMP form the dominant paradigm. Therefore, is it necessary to inculcate students in this process again at the very start of the portion of the course dedicated to military operations? Why not allow students to approach a problem free of any process and see what develops. This could benefit the Army in the long run in a number of ways. First, it could produce alternative ways of addressing problems that could potentially be added to doctrine. Second, it could allow students to understand the

MDMP and why it has developed the way that it has. And finally it can produce officers who are critical thinkers.

Incorporating Non-US Reference Material

One of the accreditation processes that examines CGSC is the Process for Accreditation of Joint Education (PAJE). In February of 2008, a PAJE team visited Leavenworth. The PAJE process evaluates seven standards and five learning objectives to ensure compliance with guidance from the Chairman of the Joint Chiefs of Staff. One of their suggestions was specifically relevant to the development of critical thought. A recurring suggestion across many of the standards and learning areas was a need to include readings from non-US sources (PAJE Team 2008). This could assist in providing the alternate perspectives that Paul and Elder have established as being paramount to the production of critical thought. Indeed this could provide opposing viewpoints which would serve as the catalyst for class discussion and debate that challenge the dominant paradigm of US centric thought.

The different departments within the College had various responses as to the validity of this recommendation with regard to their curriculum. COL DiMarco of DLRO felt that the inclusion of such readings would not assist their curriculum because of the dominance of the US Armed Forces in the area of logistics (DiMarco 2008). Dr. Thomas in DCL saw great value in the suggestion, and thought it would be worthwhile to pursue the suggestion, but noted the difficulty in obtaining suitable material (Thomas 2008). Thomas noted that DCL had used a lesson focused on the Falkland Island battle in the past, but had difficulty with copyright issues (Thomas 2008). COL Weaver of

DJIMO felt that there were numerous issues with regard to obtaining translations of publications and identifying suitable material (Weaver 2008).

Acting on this suggestion is not as hard as some may believe. The goal here is to broaden education and understanding. These perspectives should serve to provide other approaches to problems and seek to increase the understanding of students as to how other countries operate. They are not examples of how to do things, but examples of how others view similar challenges.

PAJE team member Jennifer Walsh, from the Office of the Secretary of Defense for Policy, stated that the intent of this suggestion was to offer differing perspectives on operations and how the US is viewed by other countries and militaries (Walsh 2008). Walsh believes that through the inclusion of articles written by foreign authors, an appreciation can be built for the manner in which others look at the world. These sources can come from professional journals or other PME institutions where foreign fellows often publish works regarding their perspectives on operations.

Further building on this idea, the foreign officers assigned to school here can be called upon to present additional presentations on their countries, focusing on their foreign policy goals and the way that they view the United States (PAJE Team 2008). The current “Know Your World” presentations are good for cultural awareness, but tend to steer clear of controversy and matters of foreign policy. Through the addition of readings and presentation that are substantive in nature and deal with the realities of international relations, more critical voices can be heard with regard to US involvement in the world. Walsh offered that these suggestions were aimed at helping CGSC leverage the assets it had to broaden the experience of officers in school here (Walsh 2008). No

extra resources are needed for this other than leveraging the assets already available in the library and in the foreign officers who are students.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

William F. Buckley, Jr. in his book “God and Man at Yale: the Superstitions of Academic Freedom,” advances the idea that academic freedom at Yale, while he was an undergraduate, was contained through the dominant paradigm espoused by the faculty (Buckley 1977). He alleges that the faculty was composed of professors who had all been educated and subsequently intellectually developed in essentially the same mode of liberal thought – essentially in line with the idea of a dominant paradigm or what Paul and Elder refer to as innate sociocentrism conditioned and facilitated by ego centric thinking (Paul and Elder, *The Miniature Guide to Critical Thinking: Concepts and Tools* 2004). The result of this dominant paradigm, according to Buckley, was that the faculty refused to acknowledge the validity of modes of thought that was different from their own (Buckley 1977).

God and Man at CGSC?

It could be argued that this may be happening to some degree at CGSC as well. The faculty and administrators are so connected to the processes and doctrine espoused by the school that they fail to consider the possibility of alternate approaches. Certainly this is not at the same scale as reported by Buckley, but, inadvertently it could be contended that some egocentric thinking, conditioned by years of service, does find its way into the curriculum.

This argument brings us back to Plato. There is much to learn from his Allegory of the Cave. Individual realities can be formed based on shadows and illusions. If we are

not willing to question reality to ensure that it is not one that is constructed for us, then we run the risk that we too may be living in a ‘cave.’ The captives in the allegory are comfortable with what they know – innate sociocentrism (Paul and Elder 2004, 6). They berate the individual who attempts to enlighten them telling him that what he says is not consistent with what they know to be true. Just because one is comfortable in their reality does not mean that it is the true reality.

Breaking the Paradigm

How then can this paradigm be broken? Part of the problem can be solved through the hiring of faculty who do not come from a military background. General (Retired) William Richardson, a former CGSC Commandant, has suggested just the opposite. In a speech to the students at CGSC Gen Richardson suggested that we need to have more active duty military officers on the faculty (Richardson 2008). Brigadier General Mark O’Neill, the present Deputy Commandant of CGSC, has offered that while he understands GEN Richardson’s thought process, he does not think his suggestion can be realistically accomplished in today’s Army with manpower requirements already constricting the pool of available officers for assignments to institutions such as CGSC (O’Neill 2008).

As Dr. King indicated the case to be, the College must take the opportunity presented by the institution of assets such as the Powell Chair, to attract distinguished academics to this institution. This thesis has argued that the infusion of academic rigor in the faculty would be beneficial to the curriculum and processes utilized by the school.

Critical analysis of the curriculum should also be encouraged on a regular basis. Student attitudes also must be targeted. Students must realize that this is an educational

institution, different from the Army schools they have attended thus far in their careers. This can be done through a number of measures aimed at communicating that this is a different environment.

First, the rhetoric within the college needs to be changed. Statements from top officials to the effect of; “it is only a lot of reading if you do it” or “this is the best year of your life” do not convey the attitudes that need to be developed. The school also should consider its mission statement and purpose. The author’s commentaries on what education should entail has received a great amount of criticism making the case that this school has a very important role to play in the area of training. This criticism is not without merit – but, the school should say what it means. Introduce training back in to the mission statement; play down the role of Fort Leavenworth as the “Intellectual Center of the Army.” If these statements are true, as this thesis contends, we have work to do. If however, the school means something different with regard to the mission, then the school should make that mission clear.

Second, uniforms should also be considered. At the Naval War College students wear civilian business wear to classes. This sends the message that the experience is different from what they have experienced elsewhere. This may be a dramatic leap that is untenable due to Army service culture. However, a change to Class B uniforms may be an alternative that also expresses the break from the field Army and the importance of thinking in alternate ways while a student.

Rubrics and Assessment

While there are cases when rubrics serve a purpose, it must be recognized that they come at a cost. They run a great chance of effectively limiting thought. Hegel

warns that reason, by its nature is, “not needing, as finite action does, the conditions of an external material of given means from which it may obtain its support, and the objects of its activity” (Hegel 1902, 53). If general in nature and flexible in application rubrics can assist in the administrative requirements of a course. In the author’s experience however, rubrics at CGSC have, at times limited the critical analysis of material.

Comprehensive Exams

There are other assessment tools that could be implemented in the curriculum that would foster critical thought while ensuring that students have accomplished the learning objectives of the institution. Examinations such as the Master Tactician, Master Logistician and Master Strategist are prime examples of such assessments. General comprehensive exams such as the one required for the Master of Military Arts and Sciences Degree is another possible avenue of approach to this issue. COL Weaver advocated for comprehensive exams and several other directors agreed with him (Weaver 2008). Such a tool would maximize critical thought by requiring students to synthesize the material and buttress their answers with the logic found in the educational experience.

Writing Assignments

BG O’Neill believes that critical thinking is tied to a student’s ability to write in a clear and logical manner (O’Neill 2008). He further feels that writing is one skill that officers in today’s Army are lacking compared to historical examples. In his opinion, PowerPoint has replaced written reports and analysis, and as a result officers in CGSC are often deficient in basic writing skills – to include the ability to critically work through a problem and develop logical conclusions (O’Neill 2008).

Faculty constraints in terms of providing the required mentorship, specifically PhD supervision, prevent compelling all students to write a thesis (O'Neill 2008). However, this could be a goal for the future tied also to increasing the academic credentials of the faculty. In the short term, more essay requirements, featuring open ended questions can assist in developing this skill.

This thesis has drawn many arguments from the author's experience at UNC. As mentioned in earlier chapters, these two institutions have different missions and demographics. It is not suggested that the UNC model should be completely adopted by CGSC. This would not be appropriate given the specific mission that CGSC has for producing officers to lead the Army. However, there are some aspects of the academic environment found in traditional liberal arts graduate education which the author feels could benefit the production of critical thinkers at CGSC.

Revolution

This thesis essentially advocates for a revolution in the way in which CGSC bases its academic curriculum. As introduced in the chapter one, the Army has a fundamental conflict between training and education. CGSC should be an educational institution. This is what the mission statement calls for and this is in line with what similar institutions throughout history and around the world have sought to do.

As an educational institution that brings to the military education system a true graduate level experience, the product will be an officer equipped with the tools of critical thought. This officer would be oriented on the production of knowledge and the advancement of the profession of arms. Such an institution would not merely be

following the doctrine of the past for the sake of completing a process, but determining which process is most appropriate for the task at hand.

This is revolutionary because it challenges some of the established norms based on the legacy rooted in the concepts of training. The revolution belongs only here. Most of the established processes and techniques within TRADOC fit well with their missions. Training of soldiers and leaders requires that there be a great deal of standardization. The point to be made is that this is a different type of organization.

A Separate Major Command

The United States Military Academy (USMA) does not fall under TRADOC although they contribute to the force pool in the same ways as TRADOC institutions. This is for very good reasons, mostly based on the fact that USMA is an educational institution. Just as USMA is an educational institution that provides an undergraduate education for Army Officers, CGSC should be known as an educational institution that provides a graduate education. Free from any TRADOC requirements, and endowed with direct access to the Chief of Staff of the Army, CGSC could exercise greater freedom of movement and thought.

Recommendations for Further Research

There are many opportunities for continuation of this research. The sample size of this thesis is one. By expanding this study to include a larger basis for comparison greater fidelity can be built in terms of observations on the effectiveness of the curriculum. Each department has the opportunity to reinforce critical thinking. Examination should be done on how this is accomplished, and how perhaps, it can be

improved upon. Specific attention should also be given to the assessment tools utilized by the courses in the curriculum to insure that they do not serve to restrict thought.

Final Thoughts

When COL Henry Leavenworth arrived at the Missouri River he went against his orders and situated the fort that was to bear his name on the strategic bluffs on the west side of the river rather than the east. This decision is an example of critical thinking at its finest. Officers critically analyzing the situation and being able to then make a decision independent of guidance – or perhaps even contrary to it. It is fitting that the tradition of such critical thought be continued at this institution.

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